

AMENDMENTS TO THE DRAWINGS

Please replace FIG. 6 with new FIG. 6 attached hereto.

The attached sheet(s) of drawings includes changes to FIG. 6.

Attachment: Replacement sheet

REMARKS

This is in full and timely response to the non-final Office Action of October 24, 2006. This paper is timely in that it is accompanied by a Petition to a ONE Month Extension of Time. Because February 24, 2006 falls on a Saturday, this paper is timely when filed on Monday, February 26, 2006. Reexamination in light of the following remarks is respectfully requested. No new matter has been added.

Claims 13-15, 19-25, 28, and 29 are currently pending in this application, with claim 13, 14, 28, and 29 being independent. Claims 13-26 are rejected under 35 U.S.C. §101 because the claimed invention is directed to non-statutory subject matter. Claim 13-25 are rejected under 35 U.S.C. §112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention. Claims 13-27 are rejected under 35 U.S.C. §103 as being unpatentable.

At least for the reasons set forth below, Applicants respectfully traverse the foregoing rejections. Further, Applicants believe that there are also reasons other than those set forth below why the pending claims are patentable, and reserve the right to set forth those reasons, and to argue for the patentability of claims not explicitly addressed herein, in future papers.

I. Priority

It is noted with appreciation that the Office Action has acknowledged receipt of the claim for priority and the certified document supporting that claim.

II. Information Disclosure Statement

Applicants thank the Examiner for providing initialed copy of forms PTO/SB/08a/b, which were submitted by the Applicants on April 25, 2005 and July 19, 2005, respectively.

III. Objections

A. Title

The title of the invention has been amended by the foregoing amendment. Therefore, withdrawal of the objection is respectfully requested.

B. Abstract

The abstract of the disclosure is objected to because of the length. By the foregoing amendment, the abstract has been amended so as not to exceed 150 words, complying with MPEP §608.01(b).

C. Disclosure

The specification is objected to because on page 12, line 11; page 13, line 6; Figure 4 is referenced wherein Figure 4 consists of 4 sub-drawings 4(a)-4(d) and the relevant one(s) are not specified.

Applicants respectfully request that 4 sub-drawings 4(a)-4(d) show the same display example, wherein 4(a) shows a perspective view of the display example, 4(b) shows a side view thereof, 4(c) shows a front view thereof, and 4(d) shows a bottom view thereof. Therefore, all the 4 sub-drawings 4(a)-4(d) are relevant ones. By the foregoing amendment, the corresponding portions have been amended so as to show all the 4 sub-drawings are relevant ones. Accordingly, withdrawal of the objection is respectfully requested.

Also, specification is objected to because on pages 7-8 there is handwriting on the figure descriptions. By the foregoing amendment, the handwriting portions are cancelled. Therefore, withdrawal of the objection is respectfully requested.

Further, the specification is objected to because of inconsistencies between description of Figure 8 on page 14, line 24 and Figure 8. By the foregoing amendment, the inconsistencies have been amended.

Moreover, the specification is objected to because the Brief Description of Drawings section fails to refer to Figures 4(d), 15(a), 15(b), and 15(c). By the foregoing amendment, the description has been amended. Therefore, withdrawal of the objections is respectfully requested.

Finally, the specification is objected to as failing to comply with 35 U.S.C. 112, first paragraph, because it uses a plurality of terms such as “processed-body”, “process-contents” and “the like which do not have clear English language equivalents and/or sufficient explanations. By the foregoing amendment, the terms have been changed to overcome the objections. Therefore, withdrawal of the objection is respectfully requested.

D. Drawings

The Drawings are objected to because Figure 6 runs off the edge of the page. By the foregoing amendment, the drawings have been amended so as to overcome the objection. Therefore, withdrawal of the objection is respectfully requested.

Also the drawings are objected to as failing to comply with 37 CFR §1.84(p)(5) because they include the following reference character(s) not mentioned in the description. Specifically, the Office Action asserts that Figure 11(a) and 11(c) contain element 59, which is defined for Figures 4 and 5 but not for these figures.

However, Figure 11(a) and 11(c) does not contain the element 59, but the element 59'. Applicants respectfully request for detail explanation of the objection.

E. Claims

Claims 13-27 are objected to because the claims appear to be a direct translation from a foreign language and do not utilize correct, idiomatic English. By the foregoing amendment, these claims have been amended so as to overcome the objection. Therefore, withdrawal of the objection is respectfully requested.

IV. Rejection under 35 U.S.C. §101

Claims 13-26 are rejected under 35 U.S.C. §101 because the claimed invention is directed to non-statutory subject matter. The rejection is respectfully traversed.

By the foregoing amendment, the claims have been amended so as to recite structure of the CAD system and claims 16-18, 26 and 27 have been canceled. Therefore, withdrawal of the rejection is respectfully requested. Moreover, computer program product claims have been added by the foregoing amendment.

V. Rejection under 35 U.S.C. §112

Claims 13-25 are rejected under 35 U.S.C. §112, second paragraph, as indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention. Specifically, the Office Action asserts that claims 13 and 14 attempt to claim multiple statutory categories of invention. As to claim 27, the Office Action asserts that it claims an article of manufacture that contains a system, thusly including two statutory categories of invention in one invention. The rejection is respectfully requested.

By the foregoing amendment, the claims have been amended so as to overcome the rejection. Therefore, the withdrawal of the rejection is requested.

Claims 13-27 are rejected under 35 U.S.C. §112, as having terms “processed-body”, “processed-contents”, since they do not have clear English language equivalents and/or sufficient explanations.

As stated above, claims 16-18, 26, and 27 have been canceled. Moreover, by the foregoing amendment to claims, the term “processed body” has been changed to “process body for expressing a shape of a portion to be removed from an original product body”. Applicants believe that no matter has been added by the amendment. Therefore, withdrawal of the rejection is respectfully requested.

The term “process-contents” division is defined, for example, in page 11, lines 18 to 27 of the original specification or page 11, line 24 to page 12, line, 5 of the clean up version of substitute specification. Thus, Applicants believe that the term “process-contents” division has sufficient explanations. Therefore, withdrawal of the rejection is respectfully requested.

VI. Rejection under 35 U.S.C. §103

A. Claim 13

Claims 13, 15-19 and 25-27 are rejected under 35 U.S.C. §103(a) as unpatentable over Taylor et al. (US 5,991,528 A1). Applicant respectfully traverses this rejection.

Claim 13 is directed to a CAD system comprising: a memory unit having a processing information group and a process definition group, wherein the processing information group includes a body data division which stores body information, and a process-contents division which stores information about contents of process operations, and wherein the process definition group contains definitions of a plurality of series of

process operations a display device that displays an image; and a controller, in which upon selection of a series of process operations from the plurality of series of process operations and selection of a process body for expressing a shape of a portion to be removed from an original product body via an input device, a shape parameter of the selected process body is extracted from the original product body, a tool parameter for processing is determined based on the selected series of process operations and the extracted shape parameter, information of the process body is stored in the body data division, the tool parameter is stored in the process-contents division in relation to information of the process body, and the process body is displayed on the display device.

Taylor arguably discloses an expert manufacturing system.

None of the applied art, alone or in combination discloses, teaches or suggests that “upon selection of a series of process operations from the plurality of series of process operations and selection of a process body for expressing a shape of a portion to be removed from an original product body via an input device, a shape parameter of the selected process body is extracted from the original product body, a tool parameter for processing is determined based on the selected series of process operations and the extracted shape parameter, information of the process body is stored in the body data division, the tool parameter is stored in the process-contents division in relation to information of the process body, and the process body is displayed on the display device”.

Accordingly, withdrawal of this rejection and allowance of the claim is respectfully requested.

B. Claims 14

Claims 14, 20, and 24 are rejected under 35 U.S.C. §103(a) as unpatentable over Taylor et al. (US 5,991,528 A1) as applied to claim 1 and further in view of Frey et al (US 5,691,909). Applicant respectfully traverses this rejection.

Claim 14 is directed to a CAD system comprising: a memory unit having a processing information group and a process definition group, wherein the processing information group includes a body data division which stores body information, and a process-contents division which stores information about contents of process operations , wherein the process definition group contains definitions of a plurality of series of process operations; a display device that displays an image; and a controller, in which upon selection of series of process operations from the plurality of series of process operations and selection of a process body for expressing a shape of a portion to be removed from an original product body via an input device, a shape parameter of the selected process body is extracted from the original product body, a tool parameter for processing is determined based on the selected series of process operations and the extracted shape parameter, information of the process body is stored in the body data division, the tool parameter is stored in the process-contents division in relation to information of the process body, body data as CAD data are generated separately from the parts to be processed, as shapes which do not match as after profiling operation or other process operations, the generated body data is stored in the processed-body division.

Taylor et al arguably discloses an expert manufacturing system. Frey et al arguably discloses “upon selection of series of process operations from the plurality of series of process operations and selection of a process body for expressing a shape of a portion to be removed from an original product body via an input device, a shape parameter of the selected process body is extracted from the original product body, a tool parameter for processing is determined based on the selected series of process operations and the

extracted shape parameter, information of the process body is stored in the body data division, the tool parameter is stored in the process-contents division in relation to information of the process body, body data as CAD data are generated separately from the parts to be processed, as shapes which do not match as after profiling operation or other process operations, the generated body data is stored in the processed-body division”.

Accordingly, withdrawal of this rejection and allowance of the claim is respectfully requested.

C. 15-20 and 24-27

Since claims 16-18., 26, and 27 have been canceled, the rejections of these claims are now moot. Withdrawal of the rejections is respectfully requested.

Also, Applicant submits that claims 15, 19, 20 and 24-27 depending on claim 13 or 14 are also allowable for at least the reasons that claim 13 or 14 is allowable as discussed. Therefore, withdrawal of the rejections is respectfully requested.

D. Claim 21

Claim 21 is rejected under 35 U.S.C. §103(a) as unpatentable over Taylor et al. in view of Frey as applied to claim 20, and further in view of Takada et al. (US PGPub 2001/040995). Applicant respectfully traverses this rejection.

Applicants submit that claim 21 depending on claim 13 or 14 is also allowable for at least the reasons that claim 13 or 14 is allowable as discussed. Therefore, withdrawal of the rejection is respectfully requested.

E. Claims 17 and 22-23

Claims 17, and 22-23 are rejected under 35 U.S.C. §103(a) as unpatentable over Taylor et al. applied to claim 13 above, and further in view of Watanabe (US 5,701,403 A). Applicant respectfully traverses this rejection.

Applicant submits that claims 17 and 22-23 depending on claim 13 or 14 are also allowable for at least the reasons that claim 13 or 14 is allowable as discussed.

Therefore, withdrawal of the rejection is respectfully requested.

VII. Newly Added Claims


Claims 27 and 28 have been added so as to claim a computer product claims. Since they recites similar features of claims 13 and 14, respectively, they are allowable. Therefore allowance of the claims is respectfully requested.

VIII. Conclusion

In view of the above amendment, applicant believes the pending application is in condition for allowance. The undersigned has been given limited recognition by the Director to prosecute as an attorney this application under 37 C.F.R. §10.9(a). Applicant believes no fee is due with this response. However, if a fee is due, please charge our Deposit Account No. 18-0013, under Order No. KKI-0105 from which the undersigned is authorized to draw.

Dated: February 26, 2007

Respectfully submitted,

By 
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Recognition)

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Attachments: Replacement Sheet

Application No. 10/532,501
Amendment dated February 26, 2007
Reply to Office Action of October 24, 2006

Docket No.: KKI-0105

Replacement sheet